

## REMARKS

### **Elections/Restrictions**

The Examiner has restricted the application to one of the following inventions:

- I. Claims 2-10, 12-24, 28-31, and 35-37 drawn to methods of diagnosing disease associated with IRF6 dysfunction using nucleic acid based methods, classified in class 435, subclass 6.
- II. Claim 11, drawn to a method of diagnosing susceptibility to Van der Woude syndrome, Popliteal pterygium syndrome or isolated cleft lip and/or palate by detecting an alteration in the activity of a polypeptide encoded by an IRF6 gene, classified in class 514, subclass 1.
- III. Claims 25 and 27, drawn to a method of identifying an agent which modulates activity of a polypeptide encoded by an IRF6 nucleic acid which comprises at least one polymorphism in table 1, classified in class 435, subclass 7.1.
- IV. Claim 26, drawn to a method of identifying an agent which alters expression of a variant IRF6 nucleic acid which comprises least one polymorphism shown in table 1, classified in class 536, subclass 24.51
- V. Claim 32, drawn to a method of diagnosing disease associated with IRF6 dysfunction by contacting a biological sample with a solid support which allows interaction with a recombinant host cell, class in class 435, subclass 325.
- VI. Claim 33, drawn to a method of diagnosing associated with IRF6 dysfunction by contacting a biological sample with a solid support which allows interaction with an isolated polypeptide encoded by an IRF6 nucleic acid which comprises at least one polymorphism in table 1, classified in class 435, subclass 7.1.

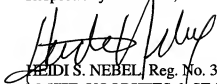
- VII. Claim 34, drawn to a method of diagnosing disease associated with IRF6 dysfunction by contacting a biological sample with a solid support which allows interaction with an antibody which specifically binds to a polypeptide encoded by an IRF6 nucleic acid which comprises a polymorphism in table 1, classified in class 435, subclass 7.1.
- VIII. Claims 39, 41-50, 56-60, 62-63, drawn to IRF6 nucleic acids which comprise at least one polymorphism in Table 1, classified in class 536, subclass 23.1.
- IX. Claim 40, drawn to a non human animal comprising a nucleic acid having SEQ ID NO: 1 and at least one polymorphism from table 1, classified in class 800, subclass 2.
- X. Claims 51, 52, 61, and 64-65, drawn to an IRF6 polypeptide comprising a polymorphism from table 1, classified in class 530, subclass 350.
- XI. Claims 53-55, and 66, drawn to an IRF6 antibody which binds to an IRF6 polypeptide comprising a polymorphism from table 1, classified in class 530, subclass 387.1.

Applicant provisionally elects Group I, Claims 2-10, 12-24, 28-31, and 35-37 drawn to methods of diagnosing disease associated with IRF6 dysfunction using nucleic acid based methods, classified in class 435, subclass 6 with traverse. Applicant further elects the Arg 84 mutation from table 1.

No fees or extensions of time are believed to be due in connection with this amendment; however, consider this a request for any extension inadvertently omitted, and charge any additional fees to Deposit Account No. 26-0084.

Reconsideration and allowance is respectfully requested.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'Heidi S. Nebel', written over the printed name.

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